

gram goes beyond merely treating the sick who may or may not seek medical care. Rather, it includes the enlistment of a cadre of different professional disciplines to work together with one common objective: to control hypertension.

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Hepatitis, Immune Globulins and Vaccines

IMMUNE SERUM GLOBULINS (ISG) are sterile solutions containing antibodies derived from human blood. Protection against hepatitis A is conferred by ISG administration within one to two weeks after exposure to hepatitis A as well as preexposure prophylaxis.

ISG manufactured after 1972 has detectable antibody to hepatitis B (anti-HB_s) present in low titer. In addition, hepatitis B immune globulin (HBIG) of high anti-HB_s titer (usually 1:100,000) is available. Both preparations offer some protection before exposure and soon after exposure to hepatitis B. The following suggestions may aid you in selecting prophylaxis for hepatitis B.

Preexposure Prophylaxis

Institutions with high-risk areas, such as hemodialysis units, or custodial institutions for mentally retarded persons should consider routine serologic screening of their employees for anti-HB_s. This will avoid costly and unnecessary use of immune globulins after acute exposure in a person with antibody. At present it appears impractical to recommend use of HBIG in persons with continued exposure to HB_s antigen. Current costs to pharmacies of HBIG is 75 to 100 times per ml the cost of ISG. For large numbers of persons, where globulin use is desired, ISG should be considered for immunoprophylaxis.

Postexposure Prophylaxis

The presence of HB_s antigen appears to correlate well with infectivity and when a test for this becomes commercially available will provide a useful tool in assessing the risk of acute exposures.

HBIG is most useful following a single acute exposure to a relatively large inoculum of HB virus, such as accidental needle stick, mucosal exposure, blood spill on an open wound. HBIG,

0.05 to 0.07 ml per kg of body weight, should be administered as soon as possible and the dose repeated in 25 to 30 days.

Infants born to mothers with acute B hepatitis in the third trimester, or mothers in whom tests are positive for HB_s antigen, should be given HBIG, 0.13 ml per kg of body weight, or ISG, 0.5 ml per kg of body weight in a single dose.

Immune globulin should be administered as soon as possible after acute exposure or birth. It is preferable to give ISG at once, rather than delay prophylaxis more than two days while obtaining HBIG. Administration of two doses approximately one month apart appears to be superior to one larger dose given early.

The use of immune globulin in cases of sexual contact or acute hepatitis B is an unsettled area. HBIG does offer protection to sexual contacts even when administered weeks after exposure, but this may reflect the reduced amount of virus present in saliva and genital secretions as compared with blood. For the present, ISG or HBIG would seem of benefit in a sex partner who does not have HB_s antigen or anti-HB_s.

Experimental hepatitis B virus vaccines show promise in initial human and animal trials. In animal trials the vaccine has been useful when administered after exposure to virus (because of the long incubation period), as well as before virus exposure. In initial human trials, the vaccine appears to be safe, to induce antibody in most employees and patients, and to provide protection against hepatitis B. Use of hepatitis vaccine in high-risk groups may be reasonable in the near future.

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Rabies Treatment Update

HUMAN DIPLOID CELL strain rabies vaccine is now available through the Center for Disease Control on a limited, experimental basis. Patients may be eligible for the vaccine if they have been bitten by a *proven* rabid animal, have a serious allergy to duck embryo vaccine or in whom there is no response to therapy with duck embryo vaccine as shown by an adequate antibody titer rise. Human diploid cell strain rabies vaccine stimu-